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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,603	08/24/2006	Haruhito Sato	291971US0PCT	8965
22850	7590	03/12/2010	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314			KEYS, ROSALYND ANN	
			ART UNIT	PAPER NUMBER
			1621	
			NOTIFICATION DATE	DELIVERY MODE
			03/12/2010	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/590,603	<b>Applicant(s)</b> SATO ET AL.	
	<b>Examiner</b> Rosalynd Keys	<b>Art Unit</b> 1621	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11, 18 and 19 is/are pending in the application.
- 4a) Of the above claim(s) 1, 2 and 6-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-5, 10, 11, 18 and 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/23/09</u> .  | 6) <input type="checkbox"/> Other: _____                          |

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## **DETAILED ACTION**

### ***Status of Claims***

1. Claims 1-11, 18 and 19 are pending.

Claims 3-5, 10, 11, 18 and 19 are rejected.

Claims 1, 2, 6-9 and 20 are withdrawn from consideration.

Claims 12-17 are canceled.

### ***Election/Restrictions***

2. Claims 1, 2, and 6-9 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on July 16, 2009.

3. Newly submitted claim 20 is directed to an invention that is independent or distinct from the elected invention for the following reasons: the elected invention does not contain unsaturation in the branching where i and j are located.

Since applicant has received an action on the merits for the elected invention, claim 20 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Information Disclosure Statement***

4. The information disclosure statement (IDS) submitted on August 24, 2006 has been considered by the examiner.

***Response to Amendment***

***Claim Rejections - 35 USC § 102***

5. The rejection of Claims 3 and 4 under 35 U.S.C. 102(b) as being anticipated by Mazet (Bulletin de la Societe Chimique de France, (12), 1969, CAPLUS printout) is withdrawn due to the amendment to the claims filed December 23, 2009.

6. The rejection of Claims 3-5 under 35 U.S.C. 102(b) as being anticipated by Annex to Official Journal of the European Communities, June 15, 1990 (CHEMLIST printout) is withdrawn due to the amendment to the claims filed December 23, 2009.

***Claim Rejections - 35 USC § 103***

7. The rejection of Claims 3, 10, 11, and 19 under 35 U.S.C. 103(a) as being unpatentable over Mazet (Bulletin de la Societe Chimique de France, (12), 1969, CAPLUS printout) in view of Cramarossa et al. (Tetrahedron, Vol. 53, No. 46, November 1997, pp. 15889-15894) is withdrawn due to the amendment to the claims filed December 23, 2009.

8. The rejection of Claims 3-5, 10, 11, and 19 under 35 U.S.C. 103(a) as being unpatentable over Annex to Official Journal of the European Communities in view of Cramarossa et al. (Tetrahedron, Vol. 53, No. 46, November 1997, pp. 15889-15894) is withdrawn.

***Response to Arguments***

***Rejection of Claims 3, 4, 10, 11 and 19 under 35 U.S.C. 103(a) as being unpatentable over Tomiyama et al. (US 4,631,292)***

9. Applicant's arguments filed December 23, 2009 have been fully considered but they are not persuasive.

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The Applicants submit that Tomiyama does not disclose or suggest the claimed alkylacetal compound of formula (2) wherein  $i + j = 10-70$  and/or  $n=7-15$ ; producing the claimed alkylacetal compound of formula (2) using a glycol of formula (8); and producing the claimed alkylacetal compound of formula (2) by reacting an alcohol with an aldehyde of formula (6) wherein  $i + j = 10-70$ .

The Examiner respectfully disagrees. The A disclosed in the general formula (I) of Tomiyama corresponds to  $(CH_2)_jCH_3$  and the B disclosed in the general formula (I) of Tomiyama corresponds to  $(CH_2)_iCH_3$ . A is disclosed as an alkyl which may be branched and contains 3-15 carbon atoms. B is disclosed as a lower alkyl, which is generally known to be an alkyl with one to six carbon atoms. Thus, certain combinations of A and B give i and j as disclosed in claims 3 and 4. Thus, the claims are suggested by Tomiyama. Further, Tomiyama teach preparing the 1,3-dioxane derivatives by reacting a glycol, which has the claimed formula (8) with an aldehyde that has the claimed formula (6), since certain combinations of A and B give i and j as disclosed in claim 19 (see col. 2, lines 27-43). Therefore, as set out in the previous office action a person having ordinary skill in the art at the time the invention was made would pursue the known options within his or her technical grasp, i.e., select from any of the available A and B substituents disclosed by Tomiyama. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense.” KSR International Co. v. Teleflex Inc., 550 U.S. \_\_\_, 82 USPQ2d 1385, 1395-97 (2007).

For the above reasons, this rejection is maintained.

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Provisional rejection of Claims 3-5, 10, 11, 18 and 19 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 of copending Application No. 11/575,255

10. This application is not in condition for allowance and the provisional double patenting rejection is maintained for the reasons given in the previous office action, mailed September 28, 2009.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

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the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. Claims 3, 4, 10, 11 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomiyama et al. (US 4,631,292), for the reasons given in the previous office action, mailed September 28, 2009.

### ***Double Patenting***

15. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

16. Claims 3-5, 10, 11, 18 and 19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 of copending Application No. 11/575,255, for the reasons given in the previous office action, mailed September 28, 2009.

***Conclusion***

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rosalynd Keys whose telephone number is (571)272-0639. The examiner can normally be reached on M-F 5:30 am-7:30 am and 9:15 am-3:15 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Sullivan can be reached on 571-272-0779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rosalynd Keys/  
Primary Examiner, Art Unit 1621

March 10, 2010